

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

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1 Claim 1 (currently amended): An isolated nucleic acid encoding an
2 IRAK-4 polypeptide, said polypeptide having IL-1R/Toll family member signal
3 transduction activity and at least about 98% amino acid sequence identity to SEQ ID
4 NO:1 or to a subsequence thereof, wherein the amino acid sequence of the polypeptide
5 comprises an alanine residue at an amino acid position corresponding to amino acid
6 position 81 of SEQ ID NO:1, and wherein said nucleic acid comprises at least about 400
7 nucleotides.

1 Claim 2 (original): The nucleic acid of claim 1, wherein the polypeptide
2 further comprises an amino acid selected from the group consisting of:
3 (i) a valine residue at an amino acid position corresponding to amino acid
4 position 432 of SEQ ID NO:1;
5 (ii) a leucine residue at an amino acid position corresponding to amino
6 acid position 437 of SEQ ID NO:1;
7 (iii) an arginine residue at an amino acid position corresponding to amino
8 acid position 444 of SEQ ID NO:1; and
9 (iv) a glutamine residue at an amino acid position corresponding to amino
10 acid position 451 of SEQ ID NO:1.

1 Claim 3 (original): The nucleic acid of claim 2, wherein the polypeptide
2 comprises each of the amino acids listed as (i) to (iv).

1 Claim 4 (original): The nucleic acid of claim 1, wherein the polypeptide
2 comprises an amino acid sequence of SEQ ID NO:1.

Claim 5 (cancelled)

1 Claim 6 (original): The nucleic acid of claim 1, wherein the polypeptide
2 comprises at least about 450 amino acids.

1 Claim 7 (original): The nucleic acid of claim 1, wherein the nucleic acid
2 comprises a cytosine at a nucleotide position corresponding to nucleotide position 242 of
3 SEQ ID NO:2.

1 Claim 8 (original): The nucleic acid of claim 7, wherein the nucleic acid
2 further comprises a nucleotide selected from the group consisting of:

3 (i) a thymine at a nucleotide position corresponding to nucleotide position
4 1295 of SEQ ID NO:2;

5 (ii) a thymine at a nucleotide position corresponding to nucleotide
6 position 1302 of SEQ ID NO:2;

7 (iii) a thymine at a nucleotide position corresponding to nucleotide
8 position 1310 of SEQ ID NO:2;

9 (iv) an adenine at a nucleotide position corresponding to nucleotide
10 position 1332 of SEQ ID NO:2; and

11 (v) an adenine at a nucleotide position corresponding to nucleotide
12 position 1353 of SEQ ID NO:2.

1 Claim 9 (original): The nucleic acid of claim 8, wherein the nucleic acid
2 comprises each of the nucleotides listed as (i) to (v).

1 Claim 10 (original): The nucleic acid of claim 1, wherein the nucleic acid
2 comprises a nucleotide sequence of SEQ ID NO:2.

1 Claim 11 (original): The nucleic acid of claim 1, wherein the nucleic acid
2 comprises at least about 1350 nucleotides.

1 Claim 12 (original): The nucleic acid of claim 1, wherein the polypeptide
2 specifically binds to antibodies generated against a polypeptide comprising an amino acid
3 sequence of SEQ ID NO:1.

1 Claim 13 (original): The nucleic acid of claim 1, wherein the nucleic acid
2 is operably linked to a promoter.

1 Claim 14 (original): An expression cassette comprising the nucleic acid
2 of claim 13.

1 Claim 15 (original): An isolated cell comprising the expression cassette
2 of claim 14.

Claims 16-30 (cancelled)

1 Claim 31 (currently amended): A method of making an IRAK-4
2 polypeptide, the method comprising:

3 (i) introducing a nucleic acid into a host cell or cellular extract, said
4 nucleic acid encoding an IRAK-4 polypeptide, said polypeptide having IL-1R/Toll family
5 member signal transduction activity and at least about 98% amino acid sequence identity
6 to SEQ ID NO:1 or to a subsequence thereof, wherein the amino acid sequence of the
7 polypeptide comprises an alanine residue at an amino acid position corresponding to
8 amino acid position 81 of SEQ ID NO:1, and wherein said nucleic acid comprises at least
9 about 400 nucleotides;

10 (ii) incubating said host cell or cellular extract under conditions such that
11 said IRAK-4 polypeptide is expressed in the host cell or cellular extract; and

12 (iii) recovering the IRAK-4 polypeptide from the host cell or cellular
13 extract.

Claims 32-62 (cancelled)

- 1 Claim 63 (previously added): The method of claim 31, wherein said
2 polypeptide comprises an amino acid sequence of SEQ ID NO:1.

Claims 64-66 (cancelled)

- DI 1 Claim 67 (New): The nucleic acid of claim 1, wherein said IL-1R/Toll
2 family member signal transduction activity is NF κ B activation activity.
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